



# ANNUAL REPORT

OF THE

*Medical Officer of Health*

FOR THE

BOROUGH OF CHELMSFORD.

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1896.

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Chelmsford :

PRINTED BY J. H. CLARKE & CO., OTTO WORKS, HIGH STREET.



*With compliments  
H.W.N.*



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# CHELMSFORD

URBAN SANITARY AUTHORITY.



Area in Acres     ...     ...     ...     ...     2,309

Population, 1891	...	...	...	11,008
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Estimated to middle of 1896 ... 11,700

Death Rate	{	General, 15·72 per 1,000 population, Estimated to middle of 1896.
		Infants (under one year of age) 118·2 per 1,000 Births Registered.

## CHELMSFORD,

*January, 1897.*

TO THE CHAIRMAN AND MEMBERS OF THE SANITARY COMMITTEE.

GENTLEMEN,

In making the usual Annual Report of the Medical Officer of Health for the past year, I am labouring under great difficulties.

Owing to the death of my Predecessor, Mr. E. Hunt Carter, in October last, I have had but a very short time to become acquainted in full with the duties of the office to which I was elected in November last. I am afraid that my report must necessarily be a scanty one, and confined in a great measure to statistical facts.

I have to thank your Clerk, Mr. Dixon, for sending me all the Monthly Reports made by the late Medical Officer, from which I have gathered most of my data.

### VITAL STATISTICS.

The Census Population taken in June, 1891, was 11,008.  
The estimated population in June, 1896, was 11,700.

Births.

During the year 1896, 296 Births have be-registered, as against 305 births in 1895. This gives a birth-rate of 25·29 per 1,000, as against 26·3 per 1,000 in 1895.

*NORTH WARD.*

Localities of the Cases reported under the Infectious  
Disease (Notification) Act.

LOCALITIES.	DIPHTHERIA.	SCARLET FEVER.	ERYSIPELAS.	TYPHOID FEVER.	PUERPERAL.
High Street.....	2	...	...	1	...
New Street and Victoria Road .....	4	...	1	...	1
Primrose Hill.....	4	...	1	1	...
Rainsford End and Maltese Estate .	2	1	...	...	...
Railway Street, Glebe Road and Townfield Street.....	2	1	...	...	...
Duke Street .....	1	...	2	1	...
Broomfield Road.....	1	...	...	...	...
Fairfield Road.....	1	..	...	...	...

*SOUTH WARD.*

Localities of the Cases reported under the Infectious  
Disease (Notification) Act.

LOCALITIES.	DIPHTHERIA.	SCARLET FEVER.	ERYSIPELAS.	TYPHOID FEVER.	
Moulsham Street .....	11	1	...	10	...
George Street.....	...	...	...	3	...
Mildmay Road .....	2	...	...	...	...
Roman Road .....	1	...	...	1	...
Baddow Road .....	...	2	...	1	...
Bridge Road .....	1	...	...	3	...
London Road .....	1	...	...	2	...
Hall Street .....	2	...	...	1	...
Wood Street .....	3	...	...	...	...
Writtle Street.....	1	...	...	9	...
Queen Street .....	3	...	...	...	...
Anchor Street.....	1	...	...	2	...
Hamlet Road .....	...	...	...	...	...
Galleywood .....	...	3	...	...	...
Friars .....	1	...	...	1	...

## Deaths.

The total number of Deaths registered in the Borough was 184 ; of which 83 occurred in the North Ward, and 101 in the South Ward.

The number of Deaths occurring in Public Institutions was 29 ; of which 21 occurred in the Union, 7 in the Infirmary, and 1 in the Infectious Hospital. Of these, 23 were aliens. Giving a total death rate of 15·72 per 1,000. The corrected death rate = 13·76 per 1,000.

Thirty-five Deaths occurred in Infants under one year of age, giving the rate of Infantile Mortality at 118·2 per 1,000 births.

The number of deaths from Zymotic diseases during the year is 21, giving a death rate of 1·8 per 1,000, against 3·1 per 1,000 in 1895.

## Zymotic

The total number of cases notified under the Infectious Diseases Notification Act during the past year was 101, of which 44 were notified as Diphtheria.

36 „ Typhoid Fever.

8 „ Scarlet Fever.

12 „ Erysipelas.

1 „ Puerperal Fever.

## Diphtheria.

The number of cases notified has been slightly increased, the number notified being 44, as against 38 in 1895. This is however a much lower return than in 1894, when 61 cases were reported.

From my own observations, although the number reported may be considered large, the general character of the disease has been slight, many of the cases became convalescent in a few days ; the after complications, I believe, have been very few and slight in character. It is a matter of some surprise that the numbers reported have not been more, for in many cases isolation is of a very rudimentary character, indeed in some cases there has been



no isolation at all. In these cases I consider that removal to the Infectious Hospital should be compulsory.

The total number of deaths from Diphtheria is six, giving a death rate of  $\cdot 51$  per 1,000. Six patients suffering from Diphtheria were removed to the Infectious Hospital. All of these cases were examined Bacteriologically, four giving the Klebs-Löffler Bacillus.

#### Typhoid Fever.

The total number of cases notified during the past year was 36, of which 33 occurred in the South Ward and three in the North Ward. This number is greatly in excess of 1895, when the notified cases number 17, of which 16 cases occurred in the South Ward.

During the months of July and August a sudden outbreak of Typhoid Fever occurred, and here I will quote the late Medical Officer's observations: "The outbreak is confined to the South Ward, and chiefly situated in Moulsham Street, Bridge Row, and Writtle Street. The cause of the outbreak is not yet known, but the disease takes a tolerably well defined course. I suspect the water supply. The milk supply has been carefully enquired into, but there are so many different supplies, and so many houses are supplied with milk from more than one dairy, that it is difficult to arrive at a certain conclusion, but all enquiries tend to disprove that the outbreak could be induced by milk. Recommended and carried out that the drains in the South Ward should be well flushed, and that disinfectants should be poured down."

In connection with this outbreak Dr. Carter reports that he brought before the Committee the inadequate accommodation of the Infectious Hospital. A Sub-Committee was formed for the purpose of going into the matter, but it never met.

On July 7th, the Hospital was full, and he suggested at a Special Committee Meeting that one of three courses be adopted :—



- (1) To hire a house.
- (2) To make terms with the Rural Sanitary Authority.
- (3) To hire, if possible, a large ward in the Infirmary.

On the 18th August, the Town Clerk wrote that the two latter suggestions had fallen through owing to the various Authorities refusing to comply.

During this time Dr. Reece, from the Local Government Board, was in Chelmsford, making enquiries, but the result I have not heard.

In connection with this matter, I would recommend that proper flushing tanks be supplied to those water closets at present without them, and that during the summer months all the drains be well and regularly flushed. In regard to the patients themselves, it is almost impossible in the poorer houses that the patients suffering with Typhoid can be efficiently nursed and isolated, I would strongly urge their removal to a regular hospital.

Scarlet Fever.

During the past year only six cases of Scarlet Fever have been notified, a marked improvement over 1895, when seventeen cases were notified. Four of these were removed to the Infectious Hospital.

Erysipelas.

Twelve cases were notified under this heading last year, none of which call for special reference.

Puerperal Fever.

One case only notified.

Other Infectious  
Diseases.

Measles and Whooping Cough, in the early part of the year, were very prevalent, and necessitated a large number of absentees from the schools. The deaths ascribed to Measles were three in number ; to Whooping Cough, nine ; of these all except one case were under five years of age.

A weekly list of cases absent from school was furnished

to the Medical Officer, and a great number of cases were visited with the object of preventing, if possible, by isolation, &c., the spread of these diseases. Isolation, however, is practically impossible, in the majority of cases, where the number in family is large and the rooms available are few in number.

Influenza has fortunately not been epidemic in the Borough, and the number of deaths ascribed to Influenza have been few in number.

Respiratory  
Diseases.

Twenty-nine deaths have been ascribed to Diseases of the Respiratory Systems apart from Phthisis. This gives a death rate of 2.47 per 1,000. This in itself is a very favorable return, especially as many of the cases included in this return are cases of Chronic Bronchitis occurring in quite elderly people.

Phthisis.

Fourteen deaths have been registered under this cause during the last year, exactly the same number were returned in 1895.

This gives a death rate of 1.19 per 1,000. This is a disease which in a great measure may be regarded as preventible. There is no doubt that it is increased by damp, insanitary dwellings, by overcrowding, &c., and by neglecting the most obvious precaution, *i.e.* that of disposing at once infective *sputa*.

Cancer.

Three deaths only have been registered as Cancer, a great improvement over the return of 1895, when 15 deaths were registered under this heading.

Water and  
Water Supply.

This is a question upon which I report with some diffidence and difficulty.

The water supplied to the Borough has been analysed chemically upon several occasions, especially was this the case during the early part of the Typhoid epidemic, when each source was separately analysed and found to be of excellent quality, and not to have altered in the least from the previous analyses made in the early part of the year. I believe that a Bacteriological examination was made also, but I do not know the result.

The water supply during the summer months caused, I believe, a great deal of anxiety to your Committee, and it was found necessary to restrict the supply somewhat. This is in itself a matter requiring very serious consideration, without doubt a constant supply ought, if possible, to be established for the present intermittent supply is full of dangers.

The supply of water to the town up to 4th Aug., 1896, was in the North Ward, 11·93 gallons, per head, per day. In the South Ward it was 14·80 „ „ „

On the date named, your Surveyor increased the supply by an alteration in the pumping, the supply now varies from day to day, according to the quantity required for trade purposes. At the present time the supply is nearly 20 gallons per head, per day.

Another matter I would wish to draw your attention to is the very frequent use of water for domestic and household purposes taken from private wells. These wells are in the very great majority of cases shallow wells. It is now well recognized that such supplies are often very dangerous, owing to the great ease with which these wells are polluted. On chemical analysis they are found to vary greatly from time to time, and at any time may prove to be the origin of a very serious outbreak of Typhoid Fever. I would urge that, if possible, the Borough be put on to a constant service of water, the water of course to be taken from a source in which contamination is reduced to a minimum, and that all shallow wells should be closed when possible.



The Infectious  
Hospital.

During the past year 15 cases have been admitted—

Six suffering with Diphtheria.

Four „ Scarlet Fever.

Five „ Typhoid Fever.

Only one death occurred among these cases admitted, that case was suffering with Typhoid Fever.

I would again draw your attention to the report of your late Medical Officer as to the inadequate accommodation afforded by this Hospital, and to urge the necessity of providing increased accommodation as soon as possible. There are only four rooms available for patients, and these at present can barely accommodate four patients. The cubic space of the front rooms being 1036 cubic feet, the back rooms giving only a cubic space of 650 feet. I consider that at least 1200 ft. cubic space should be allowed for each patient.

For a town with a population of 11,700, with the Infectious Diseases Notification Act in force, this Hospital is quite inadequate.

Infectious Diseases  
Notification Act.

An increasing amount of work is done each year under the Infectious Diseases Notification Act. Almost every case notified was visited by the Medical Officer and the Sanitary Inspector with a view to investigate its origin, and to prevent further spreading. The rooms occupied by patients notified have in a great number of cases been disinfected, but I regret that there is no proper disinfecter in the Borough to which clothes, bedding, &c. may be sent after being infected. I would strongly advise that a suitable disinfecter be obtained at an early date.

#### SANITARY MATTERS IN GENERAL.

Houses, &c.

The Sanitary Inspector has constantly been inspecting various localities during the year, and reporting thereon. Many nuisances have been detected and removed where possible ; overcrowding has been abated in many cases.

Bakehouses.        The majority of these have been inspected recently. At the last meeting of your Committee I drew attention to the fact that several of them were without proper water supply to the water closets, and urged that this should be enforced at once.

Slaughterhouses.    These are private, but are regularly inspected by the Sanitary Inspector.

Scavenging.        Scavenging is carried on fairly satisfactory, and refuse is disposed of in tips.

Dairies, Cowsheds  
and Milk Shops.    No action. They are regularly inspected.

Food.              No food which has been exposed for sale has been found unfit for human consumption.

The Housing of the  
Working Classes  
Act, 1890.        No action.

Offensive Trades.    Two only in the Borough. No complaint received.

In my Monthly Report for December I drew attention to the unsanitary condition of the yards in Moulsham. In all of these the water closets were without regular water supply, and the paving of the yards, in many cases, was in a very bad condition. Your Surveyor is now preparing a report on these yards, with a view to their general improvement.

I am,

GENTLEMEN,

Yours obediently,

H. W. NEWTON.





[A]

# TABLE OF DEATHS during the Year 1896, in the Chelmsford Urban District.

CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public Institutions being shown as separate localities.  (Columns for Population and Births are in Table B.)  (a)	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							(i)	MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																						
	At all ages. (b)	Under 1 year. (c)	1 and under 5 (d)	5 and under 15 (e)	15 and under 25 (f)	25 and under 65 (g)	65 and upwards (h)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
									Small Pox	Scarlatina	Diphtheria	Membranous Croup	FEVERS.					Cholera	Erysipelas	Measles	Whooping Cough	Diarrhoea and Dysentery	Rheumatic Fever	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	All other Diseases	TOTAL		
													Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal														
CHELMSFORD ... ..	155	35	28	4	9	38	41	Under 5	...	...	3	...	...	1	...	...	...	...	...	3	8	7	...	3	15	1	...	...	26	66	
								5 upwards	...	...	3	...	...	1	...	...	...	...	...	...	1	1	...	10	12	21	...	3	37	89	
INFECTIOUS HOSPITAL ... ..	1	...	...	...	1	...	...	Under 5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
								5 upwards	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
UNION INFIRMARY ... ..	21	2	...	...	...	4	15	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	3	...	...	14	...	1	
								5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	3	...	...	14	20	...	
CHELMSFORD INFIRMARY...	7	...	...	1	...	4	2	Under 5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	2	3	7	...	
								5 upwards	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	2	3	7	...	
TOTALS ... ..	184	37	28	5	10	46	58	Under 5	...	...	3	...	...	...	...	...	...	...	...	3	8	8	...	3	15	1	...	...	26	67	
								5 upwards	...	...	3	...	...	3	...	...	...	...	...	...	1	1	...	11	14	25	...	5	54	117	
The subjoined numbers have also to be taken into account in judging of the above records of mortality.																															
Deaths occurring within the district among persons not belonging thereto.	24	2	...	1	1	6	14	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
								5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	5	...	2	13	24	...	











